- than construction of new power plants that would otherwise have to be build to meet increased demand (\$0.07).
- 45. North Carolina has significant undeveloped alternative energy potential from solar thermal, solar photovoltaic, natural gas from anaerobic decomposition of organic material, and wind.
- 46. In its report entitled "Evaluation of the Natural Resource Impacts of the Woody Biomass Industry in North Carolina" the EMC found that without "proper protections," the use of woody biomass for energy can have significant impacts in the areas of "land use..., soil nutrient deterioration, water quality degradation, destruction of wildlife habitat, ecosystem disruption, air quality and ash deposition." The report includes the following findings:
  - a. The use of woody biomass for energy production has a broad range of potential impacts.
  - b. The differing interpretations of the statutory definition of "renewable energy resource" as applicable to biomass results in uncertainty and confusion.
  - c. There are currently no standards or guidelines that require the sustainable management of the utilization of woody biomass.
  - d. Current funding sources for forestry and landowner incentive programs may be inadequate.
  - e. State policy on woody biomass utilization for electricity production should apply equally to utilization of woody biomass for biofuels production.
  - f. Current data collection is inadequate to inform state policy makers and regulators.
  - g. Oversight of the impacts of the woody biomass market is currently spread across a number of State entities and agencies.

## **Buildings Codes and Building Practices:**

- 47. Buildings account for over 40% of electricity used in the State.
- 48. North Carolina's residential sector consumed 715,851 billion Btus of energy in 2007. The commercial sector consumed 573,467 billion Btus in the same year.
- 49. Investments in energy saving technology and other green building techniques will result in lower lifecycle building costs than conventional building construction and operating practices.
- 50. A 30% improvement in U.S. building efficiency would reduce energy bills by \$75 million in 15 years and eliminate the need for 80 new nuclear power plants over the next 20 years.
- 51. If enacted, North Carolina House Bill 1344, "Green Building Code," would require commercial and residential buildings in North Carolina to meet the latest edition of the standards in the International Code Council's International Energy Conservation Code (IECC).